



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,680	03/03/2004	Hua Wu	108910-00124	2305

4372 7590 03/03/2006
ARENT FOX PLLC
1050 CONNECTICUT AVENUE, N.W.
SUITE 400
WASHINGTON, DC 20036

EXAMINER

HU, HENRY S

ART UNIT	PAPER NUMBER
----------	--------------

1713

DATE MAILED: 03/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/790,680

Applicant(s)

WU ET AL.

Examiner

Henry S. Hu

Art Unit

1713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Pre-Amendment of March 3, 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 18-33 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This application 10/790,680 filed on March 3, 2004 is a DIV of 10/205,494 (now allowed). It is noted that USPTO has received Pre-Amendment and IDS both filed on March 3, 2004 with this application. **Original set of Claims 1-17 was cancelled; new set of Claims 18-33 was added. Claims 18-33 are now pending with three (not two as shown in Bib paper) independent claims (Claim 18, Claim 31 and Claim 33).** An action follows.

Election/Restrictions

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. **Claims 18-30 and 33**, drawn to a low extractable cation (< 1 ppm) and thermo-processable copolymer comprising TFE and at least one co-monomer(s) as specified, classified in class 526, subclass 247.

II. **Claims 31-32**, drawn to a monomeric compound (A-II) having a formula of $\text{CFX}_{\text{AI}}=\text{CX}_{\text{AI}}-\text{O}-\text{CF}_2-\text{OCF}_2-\text{CF}_2-\text{Y}_{\text{AI}}$ with $\text{Y}_{\text{AI}} = \text{F}$ or OCF_3 and $\text{X}_{\text{AI}} = \text{F}$ or H , classified in class 526, subclass 252.

3. The inventions are distinct, each from the others because of the following reasons:

Invention II and Invention I are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product is deemed to be useful as a monomeric compound, and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. Additionally, TFE copolymers from Invention I are purified through washing the polymer gel. Finally, there are a total of eight types of monomers can be used as co-monomer(s).

4. In the instant case, **at most** some of TFE copolymers from Invention I may contain repeating units from Invention II. For instance, a monomeric compound (A-II) has a formula of $\text{CFX}_{\text{AI}}=\text{CX}_{\text{AI}}-\text{O}-\text{CF}_2-\text{OCF}_2-\text{CF}_2-\text{Y}_{\text{AI}}$ with $\text{Y}_{\text{AI}} = \text{F}$ or OCF_3 and $\text{X}_{\text{AI}} = \text{F}$ or H . However, the individual property of monomer(s) will not be shown in its polymers mainly due to tremendous difference in molecular weight. Additionally, **a monomer may be used as a regular organic compound rather than be used as a monomer for polymerization**. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Art Unit: 1713

5. **Three** independent claims (Claim 1, Claim 31 and Claim 33 marked with underline) are pending now. In a close examination, the copolymers from Claim 33 are thermo-processable TFE copolymers and are required to carry a low extractable cation (< 1 ppm). Therefore, **Claim 33 is joined with Claims 18-30 as Group I.**

6. Because these inventions are distinct for the reasons given above and the search required for each group is not required for other groups have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

7. It is noted that no phone call was made to **Amy E. L. Schoenhard (tel: 202 857-6000)** by the examiner due to the complexity on this particular case. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

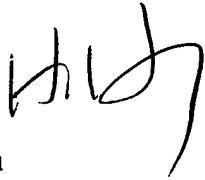
Conclusion

Art Unit: 1713

8. Any inquiry concerning this communication or earlier communication from the examiner should be directed to **Dr. Henry S. Hu whose telephone number is (571) 272-1103**. The examiner can be reached on Monday through Friday from 9:00 AM –5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reached on (571) 272-1114. The **fax** number for the organization where this application or proceeding is assigned is **(571) 273-8300** for all regular communications.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Henry S. Hu

Patent Examiner, Art Unit 1713, USPTO

February 27, 2006



DAVID W. WU
ASSISTANT PATENT EXAMINER
TECHNOLOGY CENTER 1700